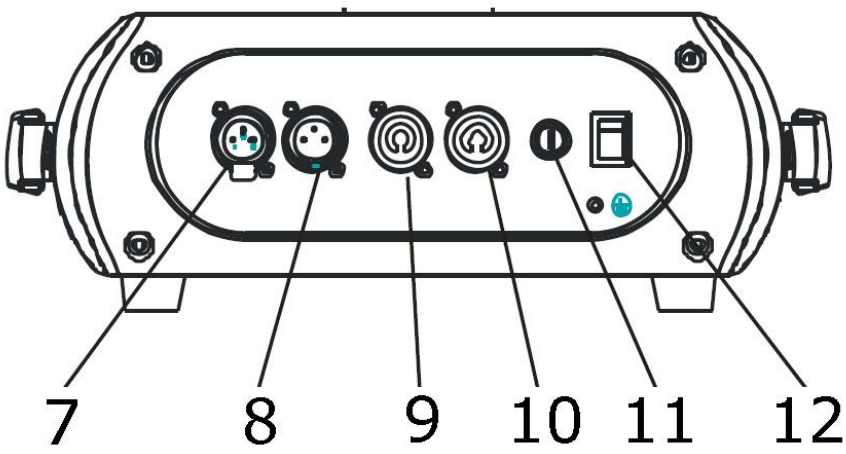
luxibel®

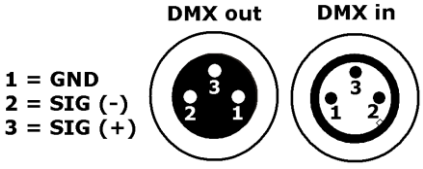
LX201

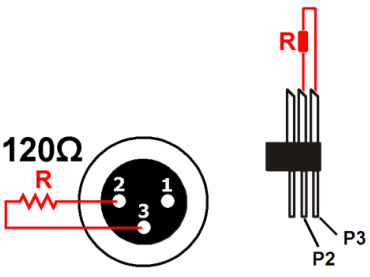
6 X 20 W WHITE LED BEAM HEAD

CE

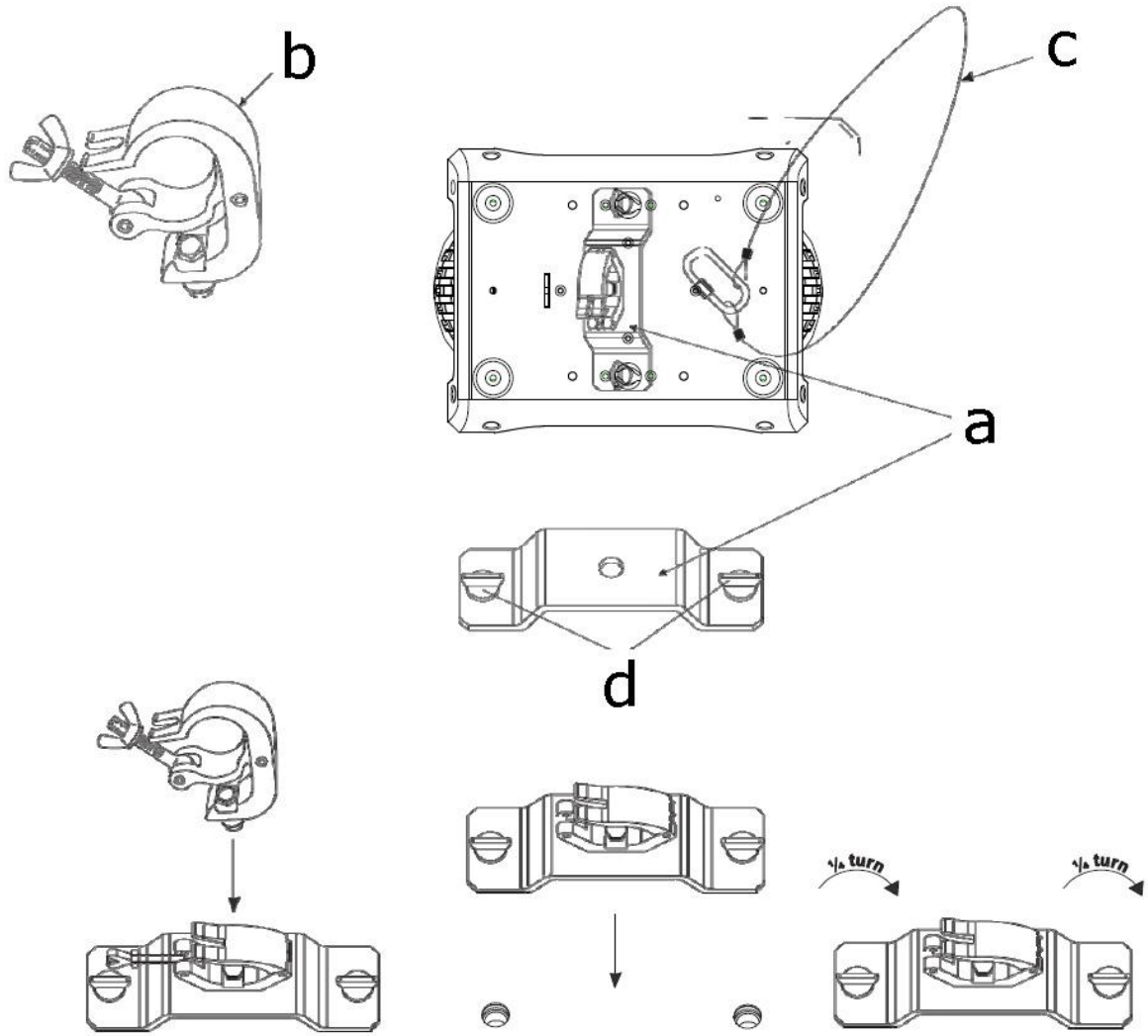
USER MANUAL







terminator


b
c
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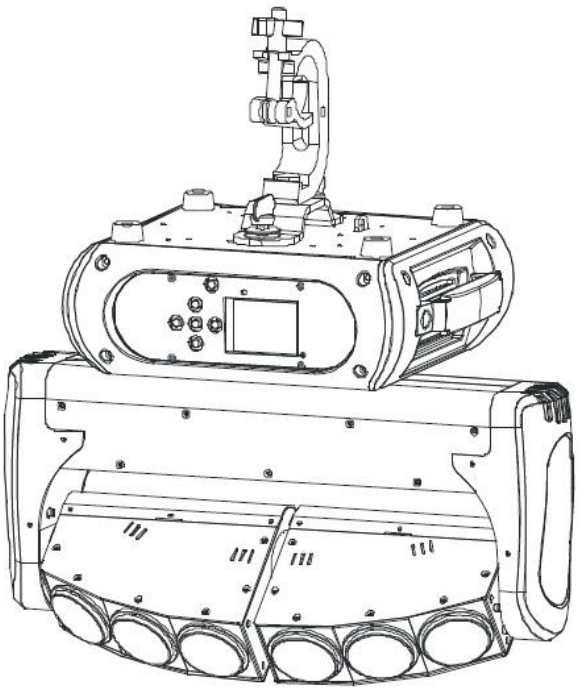
1/4 turn
1/4 turn



USER MANUAL

1. Introduction

To all residents of the European Union

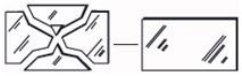
Important environmental information about this product

This symbol on the device or the package indicates that disposal of the device after its lifecycle could harm the environment. Do not dispose of the unit (or batteries) as unsorted municipal waste; take it to a specialized company for recycling. Return this device to your distributor or to a local recycling service. Respect the local environmental rules.

If in doubt, contact your local waste disposal authorities.

Thank you for choosing Luxibel®! Please read the manual thoroughly before bringing this device into service. If the device was damaged in transit, do not install or use it and contact your dealer.

2. Safety Instructions

	Keep this device away from children and unauthorized users.
	This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children shall be supervised to ensure that they do not play with the appliance.
	Indoor use only. Keep this device away from rain, moisture, splashing and dripping liquids. Never put objects filled with liquids on top of or close to the device.
	Risk of electroshock when opening the cover. Touching live wires can cause life-threatening electroshocks. Do not disassemble or open the housing yourself. Have the device repaired by qualified personnel. Be very careful during the installation: touching live wires can cause life-threatening electroshocks. **DO NOT** disassemble or open the cover under any circumstances. Touching live wires can cause life-threatening electroshocks. Do not crimp the power cord and protect it against damage. **Warning!** If the power cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid any hazard.
	Always disconnect mains power when the device is not in use or when servicing or performing maintenance activities. Handle the power cord by the plug only.
	DO NOT disassemble or open the cover. There are no user-serviceable parts inside the device. Refer to an authorized dealer for service and/or spare parts.
	Do not stare directly at the light source, as this may cause • epileptic seizure with sensitive people • temporarily loss of sight (flash blindness) • permanent (irreversible) eye damage.
	Do not use the device when noticing damage to housing or cables. Do not attempt to service the device yourself but contact an authorised dealer.
	Shields shall be changed if they have become visibly damaged to such extent that their effectiveness is impaired, e.g. by cracks or deep scratches.
	This is a Safety Class I device. It is therefore essential that the device be earthed. Have a qualified person carry out the electric connection.

- Install the device at a minimal distance of 0.5 m from flammable and explosive objects or substances.
- Respect a minimum distance of 0.5 m between the device's light output and any illuminated surface.
- The maximum ambient temperature is 45 °C. Do not operate the device at higher temperatures.

3. General Guidelines

Refer to the **Velleman® Service and Quality Warranty** on the last pages of this manual.

	Keep this device away from dust and extreme temperatures. Make sure the ventilation openings are clear at all times. For sufficient air circulation, leave at least 1" (± 2.5 cm) in front of the openings.
	Protect this device from shocks and abuse. Avoid brute force when operating the device.

- Familiarise yourself with the functions of the device before actually using it.
- Do not modify the device for safety reasons. The warranty does not cover damage caused by user modifications to the device.
- Do not crimp the power cord and protect it against damage. If the external flexible power cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid hazard.
- Only use the device for its intended purpose. All other uses may lead to short circuits, burns, electroshocks, crash, etc. Using the device in an unauthorized way will void the warranty.
- The warranty does not cover damage caused by disregard of certain guidelines in this manual and the dealer will not accept responsibility for any ensuing defects or problems.
- Nor Velleman nv nor its dealers can be held responsible for any damage (extraordinary, incidental or indirect) – of any nature (financial, physical…) arising from the possession, use or failure of this product.
- Do not switch the device on immediately after it has been exposed to changes in temperature. Protect the device against damage by leaving it switched off until it has reached room temperature.
- Keep this manual for future reference.

4. Features

The LX201 is a new and innovative double-head LED beam with white, high-power 20 W LEDs. Its two moving heads allow for new and creative effects.

- DMX control via 14, 15, 17 or 18 channels for simple or advanced controlling
  - 14-channel mode: pan, tilt, tilt2, speed, function, shutter, dimmer, dimmer for each LED (6 pcs), control
  - 15-channel mode: pan, tilt, tilt2, speed, function, shutter function, shutter, dimmer, dimmer for each LED (6 pcs), control
  - 17-channel mode: pan, pan fine, tilt, tilt fine, tilt2, tilt2 fine, speed, function, shutter, dimmer, dimmer for each LED (6 pcs), control
  - 18-channel mode: pan, pan fine, tilt, tilt fine, tilt2, tilt2 fine, speed, function, shutter, shutter function, dimmer, dimmer for each LED (6 pcs), control
- full range 0-100 % dimmer
- separate control for the two heads
- pan (630°) and tilt (270°) movement
- various shutter functions
- RDM function to change DMX address, display flip, X/Y reverse, etc.
- software upgrade possible via DMX
- hibernation when DMX is lost for preset time
- temperature indication
- automatic fan control
- user-friendly LCD display for menu setting
- auto lock function
- with powerCON in and out, linkable
- sound activation via built-in microphone

5. Overview

Refer to the illustrations on page 2 of this manual.

1	head with lenses
2	arm
3	handle
4	indicator wireless control
5	display
6	control panel

7	3-pin DMX input
8	3-pin DMX output
9	power input
10	power output
11	fuse holder
12	power switch

6. Installation

General Mounting Instructions

- Have the device installed by a qualified person, respecting EN 60598-2-17 and all other applicable norms.
- The carrying construction must be able to support 10 times the weight of the device for 1 hour without deforming.
- For truss mounting, use an appropriate clamp (not incl.) and fit an M10 bolt through the centre of the (folded) bracket.
- Adjust the desired inclination angle via the mounting bracket and tighten the bracket screws.
- The installation must always be secured with a secondary attachment such as a safety cable (e.g. VDLSC7N or VDLSC8N). The secondary attachment shall be designed and mounted in such a way that no part of the device can fall if the primary attachment fails.
- Make sure that the safety cables can carry 10 times the weight of the device. Make sure that the maximum height of drop is limited so that no injuries can occur. If the safety cables are long, wrap them around the truss multiple times to reduce the height of drop to a safe level.
- Never stand directly below the device when it is being mounted, removed or serviced. Have a qualified technician check the device once a year and once before you bring it into service.
- Install the device in a location with few passers-by that is inaccessible to unauthorised persons.
- Overhead mounting requires extensive experience: calculating workload limits, determining the installation material to be used… Have the material and the device itself checked regularly. Do not attempt to install the device yourself if you lack these qualifications as improper installation may result in injuries.
- Make sure there is no flammable material within a 0.5 m radius of the device.
- Have a qualified electrician carry out the electric connection.
- Connect the device to the mains with the power plug. All devices must be powered directly off a grounded switched circuit and cannot be run off a rheostat or dimmer circuit, even if the rheostat or dimmer channel is used solely for 0 % to 100 % switching.
- The device has a power output **[10]** to supply power to another device. When connecting several devices in a daisy chain via this output, make sure that the total current does not exceed the power line's nominal current. Use power cables with an adequate section.
- The installation has to be approved by an expert before the device is taken into service.

Attaching a Clamp

Refer to the illustrations on page 3 of this manual.

a	Omega holder
b	clamp

c	safety cable
d	quick-lock fastener

1. Screw the clamp **[b]** onto the Omega holder **[a]** using an M12 screw and appropriate nut.
2. Insert the quick-lock fasteners **[d]** of the holder **[a]** into the respective holes on the bottom.
3. Turn the fasteners **[d]** fully clockwise to tighten.

7. Connections

Power

- Connect the device to the mains with the power plug.
- All devices must be powered directly off a grounded switched circuit.
- Do not connect the device to a rheostat or dimmer circuit, even if the rheostat or dimmer channel is used solely for 0 % to 100 % switching.
- Have a qualified electrician carry out the electric connection.

- The device has a power output to supply power to another device. When connecting several devices in a daisy chain via this output, make sure that the total current does not exceed the power line's nominal current. Use power cables with an adequate section.

Power Linking

- The LX201 allows power linking through the powerCON outlet located at the back of the device.
- Power linking cords can be purchased separately.
- When power linking multiple products, you must always consider the length of the power linking cable and mount the products close enough for the cable to reach.

8. Operation

The device can be used in the following modes:

- stand-alone mode: automatic or sound-activated
- master/slave
- with a DMX-512 controller.

8.1 Control Panel and Menu

button	function
◄ ► ▲ ▼	move left/right/up/down
ENTER	menu access, confirm and save a selected option or value

Connect

DMX Address Setting

Setting of the desired DMX address.

1. Select <DMX Address> with ▲ or ▼. Confirm with ENTER.
2. Adjust the DMX address with ▲ or ▼. Confirm with ENTER.

Light

Max Temperature

Setting of the inside temperature at which the LX201 automatically switches off the LEDs.

1. Select <Max Temperature> with ▲ or ▼. Confirm with ENTER.
2. Set the temperature range between 80 °C and 139 °C with ▲ or ▼. Confirm with ENTER. Inside temperatures below 90 °C are not critical, 90 °C or above should lead to the LED being switched off.

Lamp Adjust

Value setting for each channel.

Information

Time Info

Current

Display the temporary running time of the device from last power-on. The display shows <XXXX>, X standing for the number of hours. The counter is reset after each power-off.

Fixture Life

Display the running time of the device. The display shows <XXXX>, X standing for the number of hours.

Temperature

Near Lamp Temp

Display the temperature inside the LX201 head in °C or °F.

Fan Speed

Display the current fan speed. The display shows <XXXX>, X standing for the value in Hz.

Channel Value

Display with which value the respective channel will start.

Error Message

Display the channel errors.

Fixture Model

Display the model number and brand.

Software Ver

Display the software version of each IC.

1. Select <Software Ver> with ▲ or ▼. Confirm with ENTER.
2. The display will show <1U01 VX.X.XX>, X.X.XX standing for the version number.

Set

Reset

LX201 reset via the control board. Select the different reset function with ▲ or ▼. Confirm with ENTER.

Movment

Pan Reverse

Reverse the pan movement.

Tilt Reverse

Reverse the tilt movement.

Pan Degree

Selection of the pan degree.

1. Select <Pan Degree> with ▲ or ▼. Confirm with ENTER. The display shows <540> by default.
2. Set the desired degree between 540 and 630 with ▲ or ▼. Confirm with ENTER.

Encoders

Calibration of the pan/tilt starting position.

Pan/Tilt Mode

Defining of the pan/tilt speed: smooth or stand (default).

UI Set

Mic Sens.

Setting of the microphone sensitivity.

1. Select <Mic Sens.> with ▲ or ▼. Confirm with ENTER.
2. Set the microphone sensitivity between 0 % and 99 % with ▲ or ▼. Confirm with ENTER.

No Signal

Mode setting if no signal is present.

1. Select <No Signal> with ▲ or ▼. Confirm with ENTER.
2. Select <Close>, <Hold> (default), <Auto> or <Music> with ▲ or ▼. Confirm with ENTER.

Temperature. C/F

Selection of the temperature unit: Fahrenheit or Celsius (default).

Hibernation

This function allows you to put the LX201 into stand-by mode and is automatically activated after a pre-defined time of inactivity after the last DMX activity. In this mode, the LEDs, lamps and motors will power down and return to normal operation once a DMX signal is sent.

Backlight

Setting of the time from 2 to 60 minutes after which the display will power off.

Flip Display

Flipping of the display when the LX201 is hung upside-down.

Display Bright

Setting of the display brightness value from 0 to 31.

Brand Show

Display of the LX201 brand.

Key Lock

Locking or unlocking of the control panel after exiting the menu. To unlock the control panel, press ▲ ▼ ◀ ▶ ENTER respectively.

Language

Selection of the menu language (English by default).

Users

User Mode

Selection of the channel mode (14, 15, 17 or 18 channels) or user-defined programme mode.

Edit User

Setting of the user-defined programme mode.

Calibration

Calibration and setting of the effect wheels to their correct position. Password is 050.

Fixture ID

RDM

The LX201 is RDM-ready. RDM (**R**emote **D**evice **M**anagement) is an extension of the DMX-512 protocol and makes it possible to control remote devices connected to the DMX bus.

Manual settings like adjusting the DMX starting address are no longer needed.

RDM is integrated in DMX without influencing the connections. RDM data is transmitted via the standard XLR poles 1 and 2. RDM-ready and conventional DMX devices can be operated in one DMX line. The RDM protocol sends its own packages in the DMX-512 data feed and does not influence conventional devices.

If you use DMX splitters with RDM control, make sure they support RDM. The number and type of RDM parameters depend on the RDM controller being used.

In general, the LX201 supports following commands and functions via RDM:

RDM parameter ID (slot 21-22)	**value**
Category_Network Management	
DISC_UNIQUE_BRANCH	0x0001
DISC_MUTE	0x0002
DISC_UN_MUTE	0x0003
Category_RDM Information	
SUPPORTED_PARAMETERS	0x0050
PARAMETER_DESCRIPTION	0x0051
Category_Product Information	
DEVICE_INFO	0x0060
DEVICE_MODEL_DESCRIPTION	0x0080
MANUFACTURER_LABEL	0x0081
DEVICE_LABEL	0x0082
FACTORY_DEFAULTS	0x0090
SOFTWARE_VERSION_LABEL	0x00C0
Category_DMX-512 Setup	
DMX_PERSONALITY	0x00E0
DMX_PERSONALITY_DESCRIPTION	0x00E1
DMX_START_ADDRESS	0x00F0
SLOT_INFO	0x0120
SLOT_DESCRIPTION	0x0121
Category_Sensors	
SENSOR_DEFINITION	0x0200
SENSOR_VALUE	0x0201
Category_Power/Lamp Settings	0x04xx
DEVICE_HOURS	0x0400
Category_Display Settings	
DISPLAY_INVERT	0x0500
Category_Configuration	
PAN_INVERT	0x0600
TILT_INVERT	0x0601
Category_Control	
IDENTIFY_DEVICE	0x1000
RESET_DEVICE	0x1001

Reload Default

Restore the factory settings (see table above) to their default values (shaded).

Program

Play

Slave Receive

Selection of the slave device and 1 of the 3 different slave programmes. See **Edit Chase**.

Sequence

Automatic running of the built-programmes. Select the desired programme under **Select Chase**, set the number of steps under **Edit Chase** and edit the individual scenes under **Edit Scenes**. Configure your LX201 as master (Master) or stand-alone (Alone) device.

Music

Running of the built-in programmes via sound control. Configure your LX201 as master (Master) or stand-alone (Alone) device.

Select Chase

Selection of the chase in automatic built-in programme.

Edit Chase

Editing of the built-in programme.

Edit Scenes

Editing of the scenes of the built-in programme.

Scenes Record

The LX201 features an integrated DMX recorder by which you can transmit programmed scenes from your DMX controller to your LX201. Select the scene numbers with ▲ or ▼. The called-up scenes will be transmitted automatically to the LX201.

8.2 Stand-Alone Mode

In stand-alone mode, the LX201 can be used without controller. Please refer to the chapter **Control Panel and Menu** above to set up your device.

8.3 Master/Slave Mode

A master unit can send up to 3 different data groups to the slave units, i.e. 1 master device can start up to 3 different slave units which can run 3 different programmes. The master unit sends the 3 parts in a continuous loop.

The slave unit receives data from the master unit according to the group, to which the slave unit was assigned.

Example: Setting a built-in programme in master/slave mode:

Slave Setting

1. Select <Program> with ▲ or ▼. Confirm with ENTER.
2. Select <Play> with ▲ or ▼. Confirm with ENTER.
3. Select <Slave Receive> with ▲ or ▼. Confirm with ENTER.
4. Select <Slave 1>, <Slave 2> or <Slave 3> with ▲ or ▼. Confirm with ENTER.

Master Setting

1. Select <Program> with ▲ or ▼. Confirm with ENTER.
2. Select <Play> with ▲ or ▼. Confirm with ENTER.
3. Select <Sequence> with ▲ or ▼. Confirm with ENTER.
4. Select <Master> with ▲ or ▼ for the master device. Confirm with ENTER.

Selecting the Chase

1. Select <Program> with ▲ or ▼. Confirm with ENTER.
2. Select <Select Chase> with ▲ or ▼. Confirm with ENTER.
3. Select <Chase Part 1>, <Chase Part 2> or <Chase Part 3>, i.e. which slave programme is to be sent, with ▲ or ▼. Confirm with ENTER.

Editing the Chase

1. Select <Program> with ▲ or ▼. Confirm with ENTER.
2. Select <Edit Chase> with ▲ or ▼. Confirm with ENTER.
3. Select the desired chase programme with ▲ or ▼. Confirm with ENTER.
4. You can now edit your programme.

Automatic Scene Recording

1. Select <Program> with ▲ or ▼. Confirm with ENTER.
2. Select <Edit Scenes> with ▲ or ▼. Confirm with ENTER.
3. Select the desired scene programme with ▲ or ▼. Confirm with ENTER.
4. Set the desired scene value with ▲ or ▼. Confirm with ENTER.

8.4 DMX Mode

The DMX mode allows you to control the device with any universal DMX controller.

Occupation of the XLR Connection

Refer to the illustrations on page 2 of this manual.

- Interconnect the fixtures and the controller using only DMX cables and 3-pin XLR plugs and connectors.

DMX-512 Connection

Refer to the illustrations on page 2 of this manual.

- When applicable, connect an XLR cable to the female XLR output of a controller (not incl.) and the other side to the male XLR input of the device. Multiple devices can be linked through serial linking. The linking cable should be a dual core, screened cable with XLR input and output connectors.
- Maximum recommended serial data link distance is 500 meters (1640 ft). Maximum recommended number of devices on a serial data link is 32 devices.
- DMX chain with terminator:
  A DMX terminator is recommended for installations where the DMX cable has to run a long distance or used in an electrically noisy environment
  (e.g. discos). The terminator prevents corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor between pins 2 and 3, which is then plugged into the XLR output socket of the last device in the chain.

DMX Start Address Selection

- All DMX-controlled devices need a digital start address so that the correct device responds to the signals. This digital start address is the channel number from which the device starts to "listen" to the DMX controller. The same starting address can be used for a whole group of devices or an individual address can be set for every device.
- When all devices have the same address, all the units will "listen" to the control signal on one particular channel. In other words: changing the settings of one channel will affect all devices simultaneously. If you set individual addresses, each device will "listen" to a separate channel number. Changing the settings of one channel will only affect the device in question.
- The starting address depends upon which controller is being used.

DMX Channel Values

channel				**to**	**from**	**function**	**description**
14-ch. mode	15-ch. mode	17-ch. mode	18-ch. mode				
1	**1**	**1**	**1**	0	255	pan	pan coarse
		2	**2**	0	255	pan fine	pan fine
2	**2**	**3**	**3**	0	255	tilt	tilt coarse
		4	**4**	0	255	tilt fine	tilt fine
3	**3**	**5**	**5**	0	255	tilt	tilt coarse
		6	**6**	0	255	tilt fine	tilt fine
4	**4**	**7**	**7**	0	255	movement speed	fast to slow
5	**5**	**8**	**8**	0	15	movement function	normal
				16	31		movement with blackout
				32	47		all tilt movement
				48	255		TBD
	6		**9**	0	15	shutter function	normal shutter functions
				16	31		pulse effect forward
				32	47		pulse effect reverse
				48	63		random strobe
				64	95		effect
				96	255		TBD
	7		**10**			shutter	**normal shutter functions**
				0	31		close
				32	223		strobe rate from slow to fast
				224	255		open

							pulse effect forward
				0	31		close
				32	223		strobe rate from slow to fast
				224	255		open
							pulse effect reverse
				0	31c		close
				32	223		strobe rate from slow to fast
				224	255		open
							random strobe
				0	31		close
				32	223		strobe rate from slow to fast
				224	255		open
							effect
				0	31		close
				32	223		effect speed from slow to fast
				224	255		open
6		**9**		0	31	shutter	shutter closed
				32	47		effect 1 from slow to fast
				48	63		effect 2 from slow to fast
				64	95		strobe effect from slow to fast
				96	111		effect 3 from slow to fast
				112	127		effect 4 from slow to fast
				128	159		pulse effect in sequences
				160	175		effect 5 from slow to fast
				176	191		effect 6 from slow to fast
				192	223		random strobe effect from slow to fast
				224	255		no function (shutter open)
7	**8**	**10**	**11**	0	255	dimmer	dimmer from close to open
8	**9**	**11**	**12**	0	255	white 1	white from 0 to 100 %
9	**10**	**12**	**13**	0	255	white 2	white from 0 to 100 %
10	**11**	**13**	**14**	0	255	white 3	white from 0 to 100 %
11	**12**	**14**	**15**	0	255	white 4	white from 0 to 100 %
12	**13**	**15**	**16**	0	255	white 5	white from 0 to 100 %
13	**14**	**16**	**17**	0	255	white 6	white from 0 to 100 %
14	**15**	**17**	**18**	0	7	control	normal
				8	15		reset all
				16	23		pan and tilt reset
				24	31		TBD
				32	39		TBD
				40	47		TBD
				48	55		TBD
				56	63		display off
				64	71		display on
				72	79		TBD
				80	87		TBD
				88	95		hibernation
				96	255		TBD

9. Cleaning and Maintenance

Before starting any cleaning or maintenance activities:

1. Unplug the device's power cord from the mains.

2. Let the device cool down.

Cleaning

- Clean the external optics and the housing with a slightly moist, soft cloth. Do not immerse the device in any liquid. Weekly cleaning will avoid residues building up on the lenses. Do not use alcohol or solvents.
- Always be sure to dry all parts completely before plugging the unit back in.

Maintenance

- All screws should be tightened and free of corrosion.
- The housing, visible parts, mounting supports and the installation location (e.g. ceiling, suspension, trussing) should not be deformed, modified or tampered with e.g. do not drill extra holes in mounting supports, do not change the location of the connections.
- Wipe the device regularly with a slightly moist, lint-free cloth. Do not use alcohol or solvents.
- Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external surface/vents.
- There are no user-serviceable parts, apart from the fuse.
- Contact an authorized dealer for spare parts if necessary.

Replacing the Fuse

Only replace the fuse by a fuse of the same type and rating.

1. Before replacing the fuse, unplug the mains lead.
2. Wedge the fuse holder out of its housing with a flat-head screwdriver.
3. Remove the damaged fuse from its holder and replace with the exact same type of fuse.
4. Insert the fuse holder back in its place and reconnect power.

10. Technical Specifications

power supply	100-240 VAC 50-60 Hz
power consumption	206 W
LEDs	6 x 20 W white (Osram)
luminous flux	32000 lx @ 2.5 m (single LED)
DMX signal	3-pin XLR input and output
beam angle	2.5°
dimensions	468 x 250 x 375 mm
weight	10 kg

Use this device with original accessories only. Velleman nv cannot be held responsible in the event of damage or injury resulting from (incorrect) use of this device. For more info concerning this product and the latest version of this manual, please visit our website www.luxibel.com. The information in this manual is subject to change without prior notice.

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Velleman® Service and Quality Warranty

Since its foundation in 1972, Velleman® acquired extensive experience in the electronics world and currently distributes its products in over 85 countries.

All our products fulfil strict quality requirements and legal stipulations in the EU. In order to ensure the quality, our products regularly go through an extra quality check, both by an internal quality department and by specialized external organisations. If, all precautionary measures notwithstanding, problems should occur, please make appeal to our warranty (see guarantee conditions).

General Warranty Conditions Concerning Consumer Products (for EU):

• All consumer products are subject to a 24-month warranty on production flaws and defective material as from the original date of purchase.

• Velleman® can decide to replace an article with an equivalent article, or to refund the retail value totally or partially when the complaint is valid and a free repair or replacement of the article is impossible, or if the expenses are out of proportion.

You will be delivered a replacing article or a refund at the value of 100% of the purchase price in case of a flaw occurred in the first year after the date of purchase and delivery, or a replacing article at 50% of the purchase price or a refund at the value of 50% of the retail value in case of a flaw occurred in the second year after the date of purchase and delivery.

• Not covered by warranty:

- all direct or indirect damage caused after delivery to the article (e.g. by oxidation, shocks, falls, dust, dirt, humidity...), and by the article, as well as its contents (e.g. data loss), compensation for loss of profits;

- consumable goods, parts or accessories that are subject to an aging process during normal use, such as batteries (rechargeable, non-rechargeable, built-in or replaceable), lamps, rubber parts, drive belts... (unlimited list);

- flaws resulting from fire, water damage, lightning, accident, natural disaster, etc.…;

- flaws caused deliberately, negligently or resulting from improper handling, negligent maintenance, abusive use or use contrary to the manufacturer's instructions;

- damage caused by a commercial, professional or collective use of the article (the warranty validity will be reduced to six (6) months when the article is used professionally);

- damage resulting from an inappropriate packing and shipping of the article;

- all damage caused by modification, repair or alteration performed by a third party without written permission by Velleman®.

• Articles to be repaired must be delivered to your Velleman® dealer, solidly packed (preferably in the original packaging), and be completed with the original receipt of purchase and a clear flaw description.

• Hint: In order to save on cost and time, please reread the manual and check if the flaw is caused by obvious causes prior to presenting the article for repair. Note that returning a non-defective article can also involve handling costs.

• Repairs occurring after warranty expiration are subject to shipping costs.

• The above conditions are without prejudice to all commercial warranties.

The above enumeration is subject to modification according to the article (see article's manual).

Made in PRC
Imported by Velleman nv
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